

**Listing of Claims/Amendments to the Claims:**

The listing of claims that follows will replace all prior versions in the application.

1. (Currently Amended) A method for detecting a failure of an air consumer circuit in a compressed air system for vehicles, comprising the steps of ~~wherein measuring the actual value of a variable of state (pressure, air flow rate, air mass, energy)~~ in ~~the~~ a compressed air consumer circuits, ~~is continuously measured and is evaluated in an electronic control unit, characterized by the following steps:~~

— comparison of comparing the values of the at least one of said variable of state and/or of the ~~a~~ negative gradients of the said variable of state of the compressed air consumer circuits with against a respective threshold value, and

— shutoff of the compressed air consumer circuit in question when the values of the at least one of said variable of state and/or of the said negative gradient of the said variable of state satisfies a preselected circuit-failure criterion, shutting off said compressed air consumer circuit.

2. (Currently Amended) A The method according to claim 1, characterized in ~~that the~~ wherein the preselected circuit-failure criterion is satisfied when the values and/or gradients of at least one of said the variable of state and said negative gradient of said variable of state are is below the said respective threshold value for a time at least one of equal to or longer and greater than the a time  $t_{dyn}$  of at least one of a dynamic change of the said variable of state or of and a dynamic collapse of the said variable of state ( $t \geq t_{dyn}$ ).

3. (Currently Amended) A The method according to claim 1 or 2, characterized in that wherein the said threshold value of for the said variable of state corresponds to

thea value of thesaid variable of state to be adjusted in the respective said compressed air consumer circuit.

4. (Currently Amended) A devicedetection system for detection of adetecting failure of a compressed air consumer circuit within a compressed air system, which is provided with including a compressed air supply part provided with having a compressor, and a consumer part with having a plurality of compressed air consumer circuits, which are supplied with compressed air via and electrically actuatable valves for supplying compressed air to said compressed air consumer circuits, wherein the pressure in the compressed air consumer circuits is monitored by the detection system comprising sensors for monitoring pressure in said compressed air consumer circuits, whose electrical signals are evaluated by an electronic control unit for evaluating electrical signals from said sensors that controls the and for controlling said electrically actuatable valves, characterized in that thesaid electrically actuatable valves (16, 18, 20, 22) of the associated with said compressed air consumer circuits (26, 28, 30, 32, 34, 36) are being open, and in that, for detection of the failure of a compressed air consumer circuit, the said control unit (84) compares being adapted to compare determined values of at least one of a variable of state in individual ones of said compressed air consumer circuits (pressure, air flow rate, air mass, energy) and/or a negative gradients of asaid variable of state with against a respective threshold value and identifies to identify failed ones of said compressed air consumer circuits as a defective or failed circuit, and it switches the valve to switch ones of said electrically actuated valves associated with this compressed air consumer said failed ones of said compressed air consumer circuits to a blocked closed state in order to shut off thesaid failed ones of said compressed air consumer circuits in question if the when at least one of said variable of

state pressure values and/or negative pressure gradients thereof satisfy a preselected circuit-failure criterion.

5. (Currently Amended) A device The system according to claim 4, characterized in that wherein the said preselected circuit-failure criterion is satisfied when the values and/or gradients of the monitored at least one of said variable of state and said negative gradient are is below the said respective threshold value for a time  $t$  at least one of equal to or longer and greater than the a time  $t_{dyn}$  of at least one of a dynamic change of the said variable of state or of and a dynamic collapse of the said variable of state ( $t \geq t_{dyn}$ ).

6. (Currently Amended) A device The system according to claim 4, characterized in that wherein the said threshold value of for said the variable of state corresponds to the a value of the said variable of state to be adjusted in the respective failed ones of said compressed air consumer circuits.

7. (Currently Amended) A device The system according to claim 4, characterized in that wherein the said electrically actuatable valves are solenoid valves.

8. (New) The method according to claim 1, wherein said variable of state is at least one of pressure, air flow rate, air mass and energy of said compressed air consumer circuit.

9. (New) The system according to claim 4, wherein said variable of state is at least one of pressure, air flow rate, air mass and energy of said compressed air consumer circuits.